



United States Department of the Interior

OFFICE OF THE SECRETARY

Minerals Management Service
South Central Region
P. O. Box 26124
Albuquerque, New Mexico 87125

April 20, 1982

CERTIFIED - RETURN RECEIPT

Mr. William Grey
Chairman, Anaconda EIS Team
The Anaconda Minerals Company
555 17th Street
Denver, Colorado 80217

ALBUQUERQUE DISTRICT MINING
RECEIVED

dy APR 22 1982

MINERALS MANAGEMENT SERVICE
ALBUQUERQUE, NEW MEXICO

Dear Mr. Grey:

We have completed our initial technical review of the Jackpile-Paguate Reclamation Plan which was submitted on March 16, 1982. Our review was coordinated with the Bureau of Indian Affairs, Pueblo of Laguna, and consultants to the Pueblo. Attached is a list of the questions and requests for additional information which resulted from this review. Please submit five copies of your responses to the items on the list as soon as possible.

Most importantly, we must receive the information discussed in Item Number 11 immediately. This information was to be submitted in February 1982, and the EIS cannot proceed until it is received.

If you have any questions, please contact me.

Sincerely yours,

Marc E Nelson

Marc E. Nelson
EIS Task Force Leader

Enclosures

cc:

DMS, Albuquerque District

MENelson:ab: 04-21-82

MINERALS MANAGEMENT SERVICE
SOUTH CENTRAL REGION

April 20, 1982

ALBUQUERQUE DISTRICT MINING
Big RECEIVED *DR*
ms APR 23 1982 *Jim*
MINERALS MANAGEMENT SERVICE
ALBUQUERQUE, NEW MEXICO

REVIEW OF THE ANACONDA MINERALS COMPANY'S PROPOSED RECLAMATION PLAN
DATED MARCH 1982

1. Please provide a timetable for reclamation with as much detail as possible.
2. Please provide a discussion with supporting data on the radiological content and volume of the rail spur ballast, and the adjacent soils which you are proposing to return to the open pits. Your December 23, 1981, answer to a similar question was not acceptable.
3. Please provide an estimate of the costs of reclamation. This information may be held confidential if you so desire.
4. Please provide a summary and analysis of the data obtained from the various environmental monitoring systems at the mine. The summary should reflect the most recent data.
5. Please provide a detailed list of the U_3O_8 content and volume of all protore stockpiles, including those stockpiles within the open pits such as 17-E-N, JSG, SP-1, 17-E, SP-1E, and others. This information should be submitted under separate cover, since it must be held confidential.
6. Please provide copies of the following reports:
 - a. The hydrologic reports recently completed.
 - b. The addendum to the subsidence report which was previously submitted.
 - c. The radiological report recently completed.
 - d. The geomorphologic report prepared by Dr. Stanley Schumm.
 - e. The Morrison-Knudson study on diverting surface water off of the waste pile terraces.

7. Please provide the volume of material contained in the following:

- a. Topsoil stockpiles.
- b. Topsoil borrow areas.
- c. Protore stockpiles.
- d. Future backfill material.
- e. Buttress material.
- f. Waste piles to be used as backfill.
- g. Material to be used as cover for radiologically hazardous areas.

8. Pages 25, 33, 41, and 44 refer to erosion control recommendations provided by the Soil Conservation Service. Please provide copies of these recommendations.

9. Please provide the data and a discussion of the methods used to develop the radiation background values found on page 19.

10. Please provide a report on the amount of damage that has been caused to the homes in Paguate by blasting at the mine. The report should also address the repairs that have been and will be made to these homes.

11. Please provide the information requested by the attached letters dated October 27, 1981, November 19, 1981, and January 19, 1982.

12. Page 12 states that "environmental sampling and visual observation have shown no significant adverse effects to date upon the environment outside the boundaries of the mine." Please provide a discussion of the sampling that has led you to this conclusion.

13. Page 28 states that the indoor gamma radiation levels will not exceed two times the natural background for that particular area. Please provide specific values for the background levels for each area to be reclaimed to this standard.

14. Please provide a detailed description of the procedures to be used for closing the adits and declines, including the present condition of mine entries (size, existing support, etc.); composition of fill material, and allowances for settling; construction of seals or bulkheads in entries, etc.

15. Please provide a detailed description of the filling, bulkheading, and plugging of ventholes (e.g., present condition of venthole's casing, etc.; composition of fill material, and allowances for settling; details of bulkhead construction; details of the concrete plug's thickness, location within hole column).

16. The plan states that the pits will be backfilled to three feet above the projected groundwater recovery level. We question whether your recovery projections are accurate enough to allow such a slim margin for error. In addition, the cross-sections and maps in the plan are not accurate within three feet. Please provide a discussion of the range in error of your recovery projections.

17. Will Anaconda give hiring preferences to members of the Pueblo of Laguna throughout the reclamation process?

18. Page 34 states that there are a number of examples which indicate that your revegetation techniques will retard erosion on steep slopes. Please provide a discussion of the location of these examples, and of their applicability to the Jackpile-Paguate Mine.

19. Page 34 discusses the rip-rapping of head cuts to retard erosion. Where, specifically, will these measures be used? Who designed these erosion retarding structures?

20. What criteria did you use to choose the location for the structures to bring water off of the waste piles?

21. Plate 6.1-14 should be modified to show the extent of the terrace feed channels.

22. Page 44 states that broadcast seeding will be utilized on problem areas. Please explain what you mean by problem areas. Do these include all dump slopes?

23. Page 26 states that the Jackpile sandstone exposed on the pit walls has been shown not to constitute a radiological hazard. Please provide a technical justification for this statement.

24. Anaconda previously made a commitment to backfilling the North Paguate Pit to floodplain level. Please provide your rationale for withdrawing this commitment.

25. The plan provides only one cross-section for the FD-1 dump slope, and it is difficult to determine how much modification of the slope is being proposed. Please provide additional cross-sections or a discussion which further defines the modifications that are being proposed for this dump slope.

26. Plate 6.1-8 and the associated cross-sections do not conform with the amount of backfilling shown on Plate 4.1-2. Plate 6.1-9 and the associated cross-sections do not conform with the amount of buttressing shown on Plate 4.1-2. Plate 6.1-6H and cross section 991, 800E do not conform with the amount of backfilling shown on Plate 4.1-2. Please correct these errors.

27. Plate 4.1-2 shows four topsoil stockpiles (TS-1, TS-2A, TS-2B, and TS-3) but Table 4.1-1 and page 13 show only two topsoil stockpiles. Please correct this error.

28. Page 32 states that no terrace backslope will exceed 2:1, yet the cross-sections for dumps S, T, FD-3, FD-1, and V show slopes in excess of 2:1. Please correct this discrepancy.

29. Plate 6.1-17 shows drainage relief for blocked drainage Number One, but the plan states that there will be no mitigation for this blocked drainage. Please explain this discrepancy.

30. Page 50 states that the Pueblo of Laguna must agree not to allow commercial/industrial facilities to be built on any portion of the Anaconda leases disturbed by mining. Does this statement mean that Anaconda is proposing that the buildings to be left on lease Number 4 should not be used for commercial/industrial facilities? If this is correct, what uses does Anaconda feel is acceptable for these structures?



United States Department of the Interior

GEOLOGICAL SURVEY
South Central Region
P. O. Box 26124
Albuquerque, New Mexico 87125

January 19, 1982

Mr. William Grey
Chairman, Anaconda EIS Team
The Anaconda Company
555 17th Street
Denver, Colorado 80217

Dear Mr. Grey:

The EIS Task Force has identified the following areas where our information on the Jackpile-Paguate Mine is inadequate. Please provide the following information as soon as possible:

1. The date that the Woodrow Mine was backfilled, a discussion of the type of material used for backfilling, and a discussion of the amount of settling that has or is occurring.
2. The date that Alpine and PW 2/3 were sealed, and a discussion of the method used to fill and seal these adits.
3. A map showing the extent of all underground mine workings and mine openings.
4. A map showing the location and description of all subsidence monitoring stations.

If you have any questions concerning this request, please contact Mr. David R. Sitzler at (505) 766-3830.

Sincerely yours,

(ORIG. SGD.) MARCE NELSON
Marc E. Nelson
Task Force Leader

cc:
Jackpile-Paguate Mine File
Woodrow Mine File
PW 2/3 - Alpine File
D. R. Sitzler
Chrono

MENelson:ab: 01-19-82



United States Department of the Interior

GEOLOGICAL SURVEY
South Central Region
P. O. Box 26124
Albuquerque, New Mexico 87125

November 19, 1981

Mr. William Grey
Chairman, Anaconda EIS Team
The Anaconda Company
555 17th Street
Denver, Colorado 80217

Dear Mr. Grey:

Attached is a list of data required to conduct the radiological analysis for the Jackpile-Paguate EIS.

You have advised me in previous discussions that the Anaconda Company has already compiled much of this data. Therefore, I would appreciate receiving this data as soon as possible. Please contact me if this data cannot be submitted by February 1982.

Thank you.

Sincerely yours,

Marc E. Nelson
EIS Task Force Leader

cc:
File
Chrono

MENelson:ab: 11-19-81

Data Required to Assess Radiological Impacts of Reclaiming the
Jackpile-Paguate Mine

1. Characteristics of the mine:

Table of Jackpile-Paguate Mine Surface Conditions After Rerouting
of the Road 279 but Before Reclamation.

Site Designation	Area	Source	$\frac{\text{pCi } ^{238}\text{U}}{\text{g}}$	$\mu\text{R/hr}$
C				
"				
"				
"				
"				
Sp				

- (a) Site designation = the site designation conforming to Anaconda map plate 4.1-2 (Jackpile-Paguate Mine surface conditions reclamation plan).
- (b) The area of each designated site including the slopes.
- (c) Source = the material type, for example mixture of mine waste (shale and baven sandstone).
- (d) Estimated specific activity of uranium (U-238) in each site, for example measured in a composite sample collected over each surface area.
- (e) Average exposure $\mu\text{R/hr}$ including the range from the highest to the lowest exposure measured over the site at a height of 3 ft. The technique previously utilized by the Anaconda staff for the measurement of average exposure is adequate.
2. Average U-238 specific activity of the top soil to be used for top dressing of the reclaimed sites.
3. Average background external exposure ($\mu\text{R/hr}$) measured at 3 ft from the ground, at four areas remote from Jackpile Mine and other exposure rate anomalies.
4. Daily average and the hourly radon concentrations measured in air at the monitoring stations (continuous-monitoring technique).
5. Specific activity of uranium and radium in the drinking water of the neighboring villages.
6. Specific activity of airborne particulates measured on site (monitoring stations) and background (if available).



United States Department of the Interior

GEOLOGICAL SURVEY
South Central Region
P. O. Box 26124
Albuquerque, New Mexico 87125

October 27, 1981

Mr. William E. Grey
Chairman
Anaconda EIS Team
555 17th Street
Denver, Colorado 80217

Dear Mr. Grey:

The following information is needed by the Council of Energy Resource Tribes before they can complete their socio-economic study for the Jackpile-Paguate Environmental Impact Statement. Please provide this information as soon as possible.

1. Current employment at the mine:
 - a. Number of underground personnel.
 - b. Number of surface personnel.
 - c. Percent Indian for a and b above.
2. Current employment at the Bluewater Mill, and percent Indian.
3. Number of people who have bumped at the mill:
 - a. Percent Indian bumped.
 - b. Percent Indian bumping.
4. Number of people who have taken early retirement at the mine and mill since July 1980, and the percent Indian.
5. Number of people who have taken regular retirement at the mine and mill since July 1980, and the percent Indian.
6. Will Anaconda continue to give preferential hiring to Indians during reclamation?

7. Please provide an employment phase-out schedule for mining and milling personnel.
8. Please provide an estimate of the number of workers needed during reclamation by month and by skill.
9. Please provide a pay scale for reclamation personnel.
10. What will Anaconda's policy be regarding re-employment and relocation of reclamation workers as they are laid off?

Thank you,

(ORIG. SGD.) MARC E. NELSON

Marc E. Nelson
EIS Task Force Leader

cc:
File
Chrono

MENelson:ab: 10-27-81

Pueblo of Laguna
comments 4/8/82

Anaconda Reclamation Plan Notes

1. Governor Early letter, dated June 9, 1980
2. Page 8 - 2.5 ENHANCE VISUAL PROCEDURES
3. Page 21 - 4.2.4 Radiology Anaconda conclusion
4. Page 22 - 5.1 PREVIOUS RECLAMATION PLANS
5. Page 26 - 6.1 SURFACE MODIFICATIONS (backfill slopes will not exceed 3:1)
6. Page 27 - disturbed areas, 5 foot cover. Recommend 2 feet of topsoil.
7. Highwalls - The Gavilan Mesa Highwall is not mentioned?
8. Page 31 - Anaconda will request appropriate reductions in its Bond. Is this legal? My thoughts are the total amount of the Bond should remain the same until total reclamation is completed.
9. Page 35 - Protore stockpiles. It has already been agreed by the Pueblo of Laguna and Anaconda the Pueblo would keep the protore piles. See Table 6.1-4
10. Page 37 - Highway 279 - Anaconda requests free haulage road 300 yards wide at the confluence of the Rio Paguete and Moquino.
11. Page 38 - Rail spur removal. The Pueblo would like to keep the rail spur. Also, the Quirk loading dock.
12. Page 39 and 40 - Mesita Reservoir.

Jones

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APR 07 1982

U.S. GEOLOGICAL SURVEY
ALBUQUERQUE, NEW MEXICO

MINERALS MANAGEMENT SERVICE
SOUTH CENTRAL REGION

April 7, 1982

REVIEW OF THE ANACONDA MINERALS COMPANY'S PROPOSED RECLAMATION PLAN
DATED MARCH 1982

REQUESTS FOR ADDITIONAL INFORMATION

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CLARIFICATION OF THE PROPOSED RECLAMATION MEASURES

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DISCREPANCIES IN THE PROPOSED PLAN

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shown on Plate 4.1-2. Plate 6.1-6H and cross-section 991, 800E do not conform with the amount of backfilling shown on Plate 4.1-2. Please correct these errors.

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